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The Journal of the Rhodesian Economic Society

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THE RHODESIAN ECONOMY UNDER SANCTIONS[1]

A. M. HAWKINS

Economic sanctions against Rhodesia have failed. Not only have they failed to achieve their political objective of bringing about the collapse of the existing Government, but they have also failed to depress economic activity to the extent that was intended. After 12 months of voluntary sanctions followed by eight months of mandatory United Nations sanctions there are signs that the economy—far from wilting under the pressure—is beginning to grow once again. It would appear that the worst is past.

I. The Background to Sanctions: Stagnation and Growth 1961 to 1965.

The period of Federation from 1953 to 1963 was marked by the impressive, if uneven, growth of the Rhodesian economy. During this period the real growth rate of gross national income (measured at constant 1954 prices) fluctuated considerably from year to year, reaching a high of just over 10 percent in 1956 and a low in 1962 when the real GNI actually declined.

It was anticipated that the dissolution of the Federation at the end of 1963 would mean considerable economic hardship for Rhodesia.[2] Instead, the two years 1964-65 saw a marked upturn in the economy in place of the stagnation which characterised the dying years of Federation.

This period of stagnation can be attributed to the political uncertainties of the time, to the adverse movements in the terms of trade which depressed mining activity and to the decline in investment and fall in the inflow of foreign capital that followed the very high rates of investment in the 1950s and which had left the economy with considerable spare capacity.

In the first post-Federal year (1964) the real growth rate improved to 2.9 percent from one percent in 1963 while in 1965 it was 4½ percent—the highest since 1960. More significant was the reversal in 1965 of the downward trend in gross national income per head at constant prices which had taken place between 1960 and 1964.

1. *Data used in this article is derived from the budget speech, the Economic Surveys for 1965 and 1966 and the Quarterly Economic Indicators. The fact that the full range of economic indicators is no longer published means that some gaps are unavoidable.*
2. *See particularly "Break-Up" The Phoenix Group, Salisbury, 1963.*

Investment, Employment and Migration:

Fixed capital formation as a ratio of gross domestic product in the money economy fell steadily from the high level of 37 percent in 1956 to 13.9 percent in 1964, but then improved marginally to 14 percent in 1965. The employment of Africans in Rhodesia had reached a peak of 640,000 in 1960, but then declined to 606,000 in 1963. 1964 marked the recovery year with a rise to 616,000 followed by a further increase to 624,000 in 1965. The employment pattern for non-Africans was similar falling from its 1960 peak to 86,000 in 1964 but then recovering to 89,100 in 1965.

A useful indicator of prosperity in Rhodesia is the migration of non-Africans. The net inflow reached a peak of 13,000 in 1956.[1] By 1960 this had been whittled away by rising emigration and falling immigration to 1,731. Between 1961 and 1964 there was a net loss of 12,656, reflecting the outflow, especially of Europeans, that coincided with the dissolution of the Federation. 1965 was the year of recovery with a net gain of 4,469.

Production, Foreign Trade and the Balance of Payments:

Between 1961 and 1963 industrial production was virtually stagnant. The index of manufacturing production (1964 equals 100) rose 18.4 percent in 1964 and 1965 to reach a record level of 108.2. The value of mineral output fell from a peak of £27.2 million in 1961 to £23.7 million in 1963, recovering in the next two years to a record level of just under £32 million in 1965. The value of agricultural production increased almost 11 percent in 1965 largely due to the expansion of sugar and beef production.

Because inter-territorial trade figures were not kept during the Federal period it is not possible to examine Rhodesia's trade performance in the early 60s. What can be said though is that it was widely anticipated that Rhodesia would face balance of payments difficulties after the Federal dissolution because of the expected loss of markets in Zambia and Malawi, because of the expected outflow of Europeans and the burden of external debt.

In fact, the visible trade figures showed a substantial surplus of £32.3 million in 1964 and £44.9 million in 1965. Exports to Zambia and Malawi expanded so that in 1965 these two markets accounted for just over 30 percent of total domestic exports. Zambia alone was buying 25 percent. On current account the balance of payments surplus in 1964 was £1.4 million and a record £14 million in 1965. These compare with an officially estimated surplus of £0.8 million in 1963.

Growth in 1964 and 1965 was largely export generated—the value of

1. *These figures are not completely accurate as no record was kept of inter-territorial movements during the Federal years.*

domestic exports increased 20 percent in 1965. It also reflected a rise in fixed investment and the beginnings of a long-awaited recovery in the building industry. Thus, when voluntary sanctions were imposed at the end of 1965 the worst effects of Federal dissolution had been overcome and the economy was well-placed to withstand new economic pressures. Employment was increasing, real living standards were on the rise after a four year decline and industrial, mineral and agricultural production were all improving. In addition, the external payments position was very sound.

II. Voluntary and Mandatory Sanctions: Decline and Recovery 1966-1967.

Against this background, the imposition of voluntary sanctions resulted in a fall in GDP at factor cost of 2.6 percent between 1965 and 1966. This is the first such fall since 1931, but nevertheless, a very minor one when the economic pressures on the economy are taken into account.

The domestic impact of this fall was mitigated by the reduction in net incomes paid abroad. As a result of the fall in these the decline in gross national income was only £3.4 million or one percent. Looked at in real terms—that is taking account of the rise in prices—the fall in GNI in 1966 was 3.9 percent but in real terms GNI in 1966 was still 2.6 percent above its 1964 level. More serious was the fall in real income per head. Its rise between 1964 and 1965 was followed by a decline in 1966 which took it below its 1964 level. A mitigating factor, however, was the fact that the share of wages and salaries in national income actually increased in 1966 due to the sharp fall in profits.

This limited decline in activity occurred in the face of a 36.5 percent fall in the value of exports. Direct controls—in the form of import and exchange controls—and the combination of fiscal and monetary policy were, therefore, most successful in insulating the domestic economy from this sharp contraction in foreign earnings. External balance was secured by severe import control restricting imports to 70 percent of their 1965 level. The actual volume of imports probably fell slightly more because unit prices of imports in 1966—other than mineral fuels—were 4 percent higher than in 1965. As a result of the import cutback a trade surplus of £18.7 million was achieved (1965 £41.8 million) despite the £60.1 million decline in export earnings.

The deficit on invisibles was less than in 1965—£17.2 million against £26.8 million—partly because of a fall in freight and insurance payable on imports and partly due to the blocking of payments to and from Britain and Zambia. British and Zambian action reduced private investment income by £4.4 million and the interest receipts of Government by £0.7 million. But Rhodesian counter-measures reduced the outflow by £8.8 million. As a result there was a current account surplus of £1½ million which, with the capital account outflow of £1.9 million, gave an overall deficit on current and capital account of only £400,000.

Production:

Both agriculture and mining increased their relative as well as their absolute contributions to GDP, while, in contrast, there were significant falls in distribution and manufacturing. The main increase in percentage terms was achieved in public administration, defence, education and health.

Remarkably, agricultural production increased 1.4 percent in value despite a fall of £7.4 million in the value of tobacco production. The overall increase in the value of agricultural output appears to have been £1.3 million—£0.7 million of this representing an increase in the value of subsistence production. Production for sale by African farmers rose £0.5 million to £4.2 million while in the European sector the increase was £100,000. This suggests that some element of diversification has already taken place as the £7.4 million fall in the value of tobacco production was more than offset by the £8 million rise in other agricultural output in the money economy. However, there was a once-and-for-all element in the form of sugar production for stockpile and the rise in the producer price of beef.

The value of mining output rose 2 percent above its 1965 level to a new record of £32.6 million despite the voluntary sanctions that were applied to the country's major mineral exports, and the fact that the volume of production fell marginally.

Industrial output fell 9.9 percent with only foodstuffs and electricity showing an increase. There were sharp falls in the transport and chemical and petrol product categories reflecting the fact that the oil refinery was out of production for most of the year and that the motor assembly industry was working well below full capacity. However, in the last quarter of 1966 output was higher than in the same quarter of 1965 in the clothing and footwear, sawmilling, furniture, paints, electrical machinery and miscellaneous foodstuffs categories, showing the first evidence of a recovery in manufacturing output generally.

1967 has provided further evidence of this recovery. In every month up to the end of May, the volume of industrial production was higher by an average of 5 percent than in the corresponding month of 1966, and this, despite the fact that both the major motor assemblers—BMC and Ford—had ceased production altogether. An important recovery which largely sustained the building industry in 1966 was the upsurge in private house building and the increased spending by the public sector on African housing projects. The first five months of 1967 saw a doubling in the value of building plans approved in the main centres from their 1966 levels for the same period.

The other main decline in contribution to the GDP in 1966 was in the distribution sector. The fall in external trade plus a marginal decline in consumption expenditure reflect the difficulties faced by commerce and shown in the sharp decline in commercial employment.

The most significant increase in contribution to domestic product was shown by the Public Administration sector, and reflected in the rise of 1,900 people in government employment, partly as a result of the deliberate policy of absorbing workers retrenched in other sectors.

The migration pattern for non-Africans improved in the second half of 1966 and in 1967. In the first six months of this year there was a net gain of 1,500 European immigrants compared with a net loss of nearly 1,000 in the same period of 1966.

Employment, Earnings and Prices:

Employment of Africans dropped 9,000 (1.4 percent) in 1966 to its lowest level since 1963. However, with the net emigration of 16,000 adult African males during the year it can be argued that there were more indigenous Africans in jobs at the end of the year than in 1965.

There were some noteworthy changes in the pattern of employment. The number of Africans employed in agriculture fell 10,300 (3.8 percent) and there was also an 8.3 percent fall in African employment in distribution and a 2.5 percent decline in manufacturing. Moving significantly against this trend was the 5.1 percent rise in Africans employed in building and construction. Understandably too, given the Government's employment policy, there was a small rise in Africans in Government employment.

The picture for the early months of 1967 is incomplete because employment figures for agriculture are unavailable. Outside agriculture, by the end May, the number of Africans in employment had increased 7,000 since December 1966—a rise of 2 per cent.

The number of non-Africans in employment remained unchanged in 1966 though there was a 9½ percent decline in distribution and a rise of 8.1 percent in government administration. In 1967—again in industries other than agriculture—employment of non-Africans rose 1,000 in the first five months of the year.

The average wage of Africans in employment increased 3 percent during 1966 but this was entirely offset by the 3 percent rise in the African consumer price index. Average earnings of non-Africans increased 3 percent against a 2½ percent rise in the European consumer prices index. In the first half of 1967 the index rose a further 1.6 percent over the December 1966 figure.

The fact that the overall European consumer price index has only risen 4 percent since December 1965 is puzzling. During this period the rate of sales tax was doubled from 4d. to 8d. in the £. There were customs and excise duty increases affecting drink and tobacco; sanctions and import controls have increased the cost of some imports and, sometimes, led to the substitution of more expensive locally-produced articles; petrol and vehicle expenses generally have risen sharply as a result of mandatory sanctions on motor vehicles and the oil embargo.

This raises a general consideration affecting virtually all of the data used in this discusion. In general, there is no conflict between the aggregate economic data presented in this study and personal experience but the consumer price index is the one important exception to this generalisation. Here, personal experience does appear to be at variance with the published information. In addition, there are sound technical reasons for questioning the validity of the index. After all, it is based on a consumer budget survey carried out as long ago as October, 1960. Since then, there have been changes in the pattern of expenditure. These include the introduction of television and the imposition of school fees, as well as changes in the range, nature and quality of local consumer products vis-a-vis imports. One may therefore suspect that the published figures to some extent understate the real rise in prices over the last 20 months.

Consumption Savings and Investment:

Private consumption expenditure, measured at constant prices, fell 5.8 percent from 1965 to 1966, and was one percent below its 1964 level. There was also a 5.2 percent fall in government current spending in 1966, compared with the previous year but much more important was the sharp reduction in gross fixed capital formation. At £36.2 million (1964 prices) it was no less than 21.6 percent below its 1965 level and 16 percent lower than in 1964.

Offsetting these falls were the sharp rise in stocks which, at 1964 prices, increased £24 million compared with an increase of £2.3 million in 1965 and £2.8 million the previous year. This reflects the stockpiling of tobacco and almost certainly of sugar, as well.

III. The Failure of Sanctions

If a single development can be said to highlight the failure of economic sanctions, it was the announcement in July that the Rhodesian Government was launching an immigration promotion drive. The philosophy of sanctions was the creation of economic pressures resulting in heavy unemployment and mass emigration so that the white population would force a change of government. Instead, the Rhodesian Government in mid-1967 has been able to reveal, not only that non-African employment has reached a record level but also that it was launching an immigration promotion drive to alleviate the shortage of skilled manpower facing the economy. This failure of sanctions can only be explained however, against the background of economic developments both in Rhodesia and the world in general.

For a start, sanctions have not been applied effectively even by Rhodesia's most determined enemies. The case of Zambia is a classic example. Despite that country's declared policy of boycotting Rhodesian goods Rhodesian exports to Zambia are still about half their pre-UDI level. Economic self-interest has dictated that a number of loopholes be left in the sanctions curtain. In addition to buying Rhodesian products Zambia has been forced to rely upon the Rhodesian rail transport system to a great extent, especially where imports from South Africa are concerned.

What is true of Zambia is also true to varying degrees of a number of other countries. In particular, with buoyant world demand for minerals—chrome, asbestos, copper, iron ore,etc.—it has still been possible to sell these products though perhaps at a rather reduced price even to countries who officially support voluntary or mandatory sanctions. A related point is the difficulty of identifying the origin of certain raw materials—and manufactured imports and exports as well. The refusal of South Africa and Portugal to co-operate in the sanctions campaign increased the practical difficulties of applying sanctions effectively. Their neutrality has made sanctions evasion a good deal easier than would otherwise have been the case. Decisions by some countries to honour existing contracts provided an additional loophole.

If a single transaction can be said to highlight the difficulties involved in applying sanctions the success of the Rhodesian Reserve Bank in printing its own banknotes can be used as an example. There is no doubt that the British Government went to considerable pains and expense to prevent Rhodesia from securing new banknotes and Britain's eventual failure reflects the great difficulty involved in preventing imports of any kind from reaching Rhodesia.

Thus the gap between the theory of economic sanctions and their application is very wide. The lack of enthusiastic enforcement of sanctions by countries interested in trading in the best markets, the inability of some countries to apply sanctions effectively and the numerous loopholes that exist on the administrative side help to explain the failure of sanctions.

In 1966 Rhodesian exports fell £60.1 million. This is largely a reflection of the almost-total loss of the British market—especially for tobacco—and a sharp contraction in the Zambian market. Had sanctions been applied effectively the fall in exports would probably have been at least another £20 million which would have put a very different complexion on Rhodesia's situation.

The oil embargo was never really a serious threat to the viability of the Rhodesian economy. It had certain psychological effects—particularly the turning back of tankers in the Moçambique channel. It has created difficulties for the motor trade, for the oil companies, for the pipeline company and also forced the closure of the oil refinery. The extra cost of importing fuel by road and rail has pushed up prices and production costs in the economy. However, the measure of the embargo's ineffectiveness is that petrol is rationed only through the price mechanism. A consumer can purchase as much fuel as he requires provided he is prepared to pay the surcharge of 2s. 8d. per gallon for off-ration petrol.

Apart from the difficulty of applying sanctions—and of getting less-implicated nations to apply them—is the fact that at the end of 1965 the Rhodesian economy was well-placed to withstand economic pressures. The years of Federation had seen a great broadening and diversifying of the economy. The manner in which the Rhodesian economy rode out the political storms of the early 1960s and the economic difficulties of Federal dissolution showed just how resilient it had become.

Furthermore the prosperity of 1965 with a 17 percent expansion of exports gave the economy reserves—in particular stocks of imported commodities on which it could draw in times of adversity. The sharp rise in domestic savings to a record level of nearly £65 million—almost 18½ percent of GDP—was to be an important factor in helping the economy to withstand sanctions in the subsequent year.

A related consideration—often forgotten by those who expected the economy to suffer greater damage from Federal dissolution and from sanctions has been the importance of institutional factors. A number of Rhodesia's customers were simply more accustomed to dealing with Rhodesia than with anyone else. It was more convenient as well as economic, for instance, for a wide range of Zambian importers, by force of habit if nothing else, to continue to buy from Rhodesia unless physically prevented from so doing. Direct controls in Zambia have—to an increasing extent—been preventing this but the fact that Zambia is still buying imports from Rhodesia suggests that there is a limit to the extent to which political considerations can override economic self-interest.

There is also the contrast in the approaches of the British and Rhodesian Governments. More often than not—especially in the early days of the sanctions campaign—the Salisbury officials appeared to be at least one jump ahead of their Whitehall counterparts. The delay in imposing sanctions after the declaration of Independence certainly made the Rhodesians' task easier.

In addition, with relatively few exceptions, the Rhodesians have been much nearer the mark in their forecasts and assessments than have the British. Whitehall has been made to look incompetent and inaccurate in simple matters of fact, such as the level of British imports into Rhodesia during 1966.

Britain's standing in the dispute has not been enhanced by the dual standard adopted over certain of Rhodesia's external debt obligations. The Rhodesian attitude is that the freezing of her sterling reserves in November 1965 coupled with the steps taken to deprive the country of the means to earn the foreign exchange to meet her commitments justified the decision to default on London market debt (other than that held by residents of Rhodesia, Malawi and South Africa and purchased before December 4th, 1965) debt due to the British Government and its agencies and debt under British Government guarantee. Britain, on the other hand, while claiming to be the legal Government of Rhodesia has at the same time disavowed all responsibility for Rhodesian debts. Even more ludicrous has been the British attitude over new loans floated internally by the Rhodesian Government. Britain has persistently claimed that the "illegal regime" is not capable of incurring legal obligations on behalf of the Rhodesian Government. Despite this Britain still holds the same illegal regime responsible for existing debt obligations.

The high water mark of British impotence and ineptitude was the claim made by Sir Sidney Caine, Governor of Britain's so-called British Reserve Bank of Rhodesia established soon after UDI, that the new bank notes printed in Salisbury were not legal tender.

The point must also be made that the blocking and freezing of dividends, profits and interest payable to Rhodesians by Britain and Zambia reduced Rhodesia's income by £5.1 million in 1966 while Rhodesia's retaliatory measures reduced the income paid abroad by £8.8 million—leaving a useful net gain of £3.7 million.

In sum, disillusionment with the vague threats, warnings, promises and incompetence of the British Government has, in fact, been an important explanation for the failure of sanctions.

Rhodesian Countermeasures:

Thus far, in explaining the failure of sanctions, the emphasis has been on the unwillingness or inability of foreign countries to apply measures against Rhodesia. However, the rôle of Rhodesian counter-measures should not be under-estimated.

The policy of stockpiling tobacco and sugar provided some breathing space for the agricultural sector to readjust itself to the new situation. This stockpiling policy was suitable only for a short-term holding operation. Thus, sugar production in 1967 is being reduced to 60 per cent of its 1966 level while tobacco output will be little more than half a normal year's crop. Stockpiling financed through judicious monetary policy and without any significant increases in taxation has not yet led to any serious inflation. During 1966 deposit-receiving institutions increased their lending to Government to the tune of £34.7 million to total £87.7 million—an increase of 65 percent. This was achieved by a sharp rise in personal savings as well as the cutback in bank lending to the public.

The 1967-68 budget is openly reflationary with a 9 percent rise in expenditure yielding a deficit on revenue account of 5¼ million to be covered by the accumulated surplus. Fiscal policy is being used to stimulate agricultural activity with an amount of £1¼ million set aside to subsidise the maize price; £1½ million being provided for the purchase of tobacco quotas and £120,000 for the wheat subsidy. The increases in both short and long term Government borrowing, however, necessitated a rise of £1.3 million (13 percent) in the provision for debt servicing.

Overall, fiscal policy is playing a much more positive rôle in 1967-68 presumably partly to offset the deflationary forces in the economy sparked off by the tobacco cutback, the fall in export earnings and the decline in investment.

The rôle of exchange control in providing increased personal savings for public investment has already been mentioned. The build-up of domestic funds and the shortage of investment opportunities generated an upswing in domestic home building which was a major factor making for recovery in the building industry.

Manpower controls were used as part of the holding operation to prevent skilled labour from being retrenched and forced to leave the country. In addition, the mobility of white labour between Rhodesia and South Africa and of African labour between jobs in the towns and either the reserves or the neighbouring territories moderated the unemployment problem.

The final economic argument relates to the stimulus from import substitution and agricultural diversification. It is a well-known fact that a number of countries have enjoyed outbursts of industrial growth as a result of adversity. The impact of sanctions on secondary industry has been a small decline in domestic consumer demand and a severe curtailment of exports, coupled with a substantial restriction in supplies opening the door to industrial expansion by way of import substitution. To a limited extent too, a number of exporters have been able to substitute a new foothold in the South African market for lost markets in Zambia.

Last, but certainly not least in assessing the failure of sanctions is the political aspect. The fact is that external pressure far from splitting the white electorate has tended to solidify political opinion.

IV. The Short Term Prospect.

Looking ahead, the short term prospect is that with sanctions having apparently passed their peak effectiveness an overall improvement in the level of economic activity can be expected. The most recently published indicators suggest that the recovery has already started. Employment outside agriculture is higher; industrial output has increased while building activity, retail and wholesale sales and migration have all improved over 1966. The Minister of Finance has estimated that GNP in 1967 will be higher than 1966 and may possibly exceed the 1965 figure.

Exports

Four points are quite crucial in any assessment of the economy's short term prospects. The first is the level of exports. It has been revealed that this year it has been possible to sustain a level of imports 20 percent above that of the first six months of last year. This suggests some improvement in export earnings in 1967—even despite the imposition of mandatory sanctions—so that total exports this year may be nearer £115 to £120 million than last year's £104.6 million.

The level of exports in 1968 seems likely to be a more important determinant of the level of economic activity than it was in 1966 because of the cutbacks in tobacco and sugar production. The extent to which economic activity was artificially maintained by stockpiling in 1966 and 1967 should not be forgotten. Thus, in the absence of further international steps to increase the effectiveness of sanctions it would seem probable that rising exports will play a prominent rôle in generating an upswing in the economy.

A related consideration is the level of capital goods imports. The domestic effect of import control on consumer goods has been offset to an important degree by import substitution production by Rhodesian industry. In 1966 consumer-good imports accounted for only 12 percent of the total against 18 per cent the previous year. Imports of capital goods and raw materials took the greater strain imposed by import control falling 24 percent from about £98 million to £74 million. This decline is reflected in the fall in capital formation. To make matters worse the capital account of the balance of payments showed an outflow of £1.9 million in 1966 against an inflow of £4.4 million in 1965. It is therefore essential to increase the level of export earnings so that the economy can afford a higher level of imports of capital equipment and raw materials.

Tobacco:

Second consideration is the impact of the 34 percent tobacco cutback. The table summarises the position in the tobacco industry since 1965.

Year of Sales	*Crop Weight lb. million*	*Average Price pence per lb.*	*Total income to Growers £ million*
1965	246	32.96	£33.8 m.
1966	260	24.0	£26.0 m.
1967	200	28.0	£23.3 m.
1968	132	28.0	£15.4 m.

In the short space of three years total income to growers will have been reduced by almost 55 percent. At the time of writing it is not possible to say how many growers will have withdrawn from the crop altogether but it seems that the number of tobacco farmers will have fallen by about 20 percent. The impact on employment should not be forgotten. Diversification from tobacco into other crops will almost certainly mean a reduction in employment in the agricultural sector largely because tobacco is a more labour intensive crop than the suggested substitutes. Cotton, which would appear to be the most promising alternative to tobacco, requires about four times as much land to produce the same value of output and is much less labour intensive.

The decline in agricultural production because of the tobacco cutback in 1967-68 is unlikely to be offset in 1968 by increases in activities other than tobacco—even despite the higher level of investment that might be expected to flow from the Government's provision of funds for the industry. The deflationary forces set in motion by the cutback will begin to have their effect towards the end of 1967 with the reduction in purchases by tobacco growers and a reduction in agricultural employment. The real impact of the cutback will only be felt in 1968 when the primary effect of the reduced agricultural production will be intensified by the industrial and commercial implications of the fall in activity in the tobacco processing and packing industry.

The favourable effects of the tobacco cutback should not be overlooked. First and foremost is the fact that the stockpile at the end of this year has been estimated at 210 million lbs. which clearly involves a wasteful use of financial resources to the tune of more than £20 million tied up in maintaining the stockpile. The production cutback should also have beneficial balance of payments effects because it is estimated that some 20 percent of the inputs into tobacco production represent imports.

Obviously, the pattern and success or otherwise of diversification that flows from the cutback will be quite crucial. If it involves the high cost production of import substitutes (e.g. wheat) or surplus output of maize, which is subsidised anyway, it will be much less beneficial than if it involves the economic production of crops for use by domestic industry or for export.

Investment: In 1966, gross fixed capital formation amounted to just under 12 per cent of GDP in the money economy—the lowest such percentage recorded since 1954. This compares with 14 percent in 1965 and 13.9 percent in 1964, and is only one third of the 36.2 percent achieved in 1957 and again in 1958. At constant prices investment was 21.6 percent below its 1965 level and 16 percent below its 1964 total.

A by no means insignificant element of this capital formation took the form of new house-building. This type of investment while it creates necessary facilities for the economy does not create the same extra productive capacity as an investment in new plant and equipment. Thus not only does the total fall in capital investment give rise to anxiety but also the fact that investment in agriculture fell nearly 58 percent (the completion of lowveld investment projects was a major factor here) while that in manufacturing declined 27½ percent.

The effect of this downturn in investment in 1966 must be making itself felt in 1967 and slowing the rate of economic growth. However, the short term prospect for 1967 is rather better and gross fixed capital investment this year may improve on the 1964 figure.

Inflation: The tobacco cutback plus the cumulative effect of the 1966 reduction in investment would seem likely to create certain deflationary pressures in late 1967 and 1968. Against this a reflationary budget with increased recurrent and loan expenditure plus the rise in pension payments and small tax concessions has been introduced to maintain a high level of domestic activity. This reflationary boost seems likely to ensure that the economic upswing already in progress will more than offset any deflationary tendencies. However, there is the danger of inflation arising from both demand-pull and cost-push elements.

The demand-pull element takes the form of the pressure on limited supplies of imports—even despite the recent announcement of an increase in imports. The cost-push element arises from the point mentioned above that the consumer price index probably under-states the real rise in the cost of living, which itself can be related largely to the effects of import control. In his budget speech the Minister of Finance with this problem in mind urged employees not to press wage claims. It is just possible, however, that some form of wage freeze policy might later become necessary.

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All in all, the short term outlook is relatively satisfactory. There is no reason to doubt the estimate that GNP will increase in 1967 and may even reach its 1965 level (at current rather than at constant prices) but unless there is a very rapid crumbling away of sanctions it would probably be wise to expect a slower rate of growth in 1968.

V. The Long Term Prospect

The long term prospect is less satisfactory. This is almost entirely due to the implications of the rate of growth of the African population—34 per 1,000 or almost 3½ percent.

The compound growth rate of population in the world as a whole is put at 1.7 percent per annum in a recent United Nations publication.[1] The rate for Africa is estimated at 2.1 percent a year. The Rhodesian rate is not only twice the world average but also well above the average rate for the African continent.

With high fertility the age pyramid in Rhodesia has a wide base but tapers off rapidly. Hence some 46.6 percent of the African population is under the age of 15. This involves a proportionately larger investment in human capital. The high proportion under the age of 15 means a heavy dependency load on the economy and fast rising expenditure on social services—especially health and education.[2] Children under the age of 15 are not significant producers—but only *consumers*. To a certain extent, of course, this dependency load is reduced by the high participation of young persons in subsistence cultivation but this is scarcely a desirable situation.

Aside from these issues two considerations are of vital significance. The first is the fact that such a high rate of population growth demands a rapid rate of increase in GNP each year if living standards are to improve materially. Secondly, it is necessary to create some 30,000 plus new jobs—in the money and subsistence economies combined—each year in order to provide sufficient employment opportunities.

Since 1954—even with the very rapid growth of GNI in the fifties—income per head at constant prices has only increased 5.2 percent, from £57.0 in 1954 to £60 in 1966. The pattern in the 1960s has been very unsatisfactory. Only in 1965 did real income per head (constant prices) improve. The largest fall was in 1966 when the decline was 7.0 percent.[3]

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1. *U.N. Economic Bulletin for Africa, January, 1965.*
2. *See Pages 13 to 24 above "The Economics of African Education."*
3. *It should be stressed that undue reliance should not be placed on year to year changes. The Central Statistical Office warns that the per capita figures are only approximate and are at best an indication of long term trends.*

On the employment side the position is little better. The total number of Africans in employment at the end of 1966 was 5,000 less than in 1957, although over this period the estimated African population increased by more than one million. Net emigration of Africans—50,370 since 1957—has eased the situation, though only marginally.

Some idea of the magnitude of the problem can be gleaned from the fact that even in the middle fifties when investment was at a high level and output increasing at a rapid rate, the maximum increase in African employment achieved in any one year was 28,000 between 1955 and 1956. In those two years investment was of the order of 36 percent of GDP.

If one assumes an incremental capital-output ratio for Rhodesia of the order of 3:1 (which is probably too narrow) and a desired rate of economic growth of 6 per cent per annum this would mean a desired rate of net investment of no less than 18 percent of GDP. If one further assumes a depreciation rate of (say) 4 percent, this would then mean that in order to obtain a growth rate of 6 percent, and thereby secure some real improvement in living standards, at least 22 percent of GDP would need to be invested each year. In 1966 this would have meant almost doubling gross fixed capital formation. It can be argued that Rhodesia has only managed a sufficiently high level of investment when there has been a substantial capital inflow. The prospects for this are not good under existing circumstances.

The present low level of investment and high rate of population growth means that one must expect a rise in urban unemployment coupled with deepening rural poverty in the subsistence sector. In some areas a critical position must soon be reached—if it has not been reached already—whereby the ratio of labour to land in the subsistence economy is such as to severely inhibit the possibilities of achieving increases in productivity and output per head.

One other long term problem merits brief mention. It can be argued that by becoming less dependent on tobacco the agricultural industry will be more soundly based in the future. Against this, it can be argued that in relation to the level of inputs into agriculture farmers income will be stabilised at a somewhat lower level[2] than hitherto even if the diversification programme goes ahead smoothly and efficiently which is open to some doubt. More important is that barring some sort of political settlement in the next 18 months or so there will never be a return to normality for the tobacco industry. The grave danger is that world demand over the next two or three years will be met from U.S. stocks thereby giving other country-producers the time to step up their outputs.

2. *See speech by the Minister of Agriculture, Mr. G. W. Rudland, August 1st, 1967. Hansard Vol. 68, No. 6, Col. 374. "It is true that in ordinary circumstances there is no other crop which can adequately replace tobacco in the farming economy . . ."*

VI. Conclusions: The Cost of Sanctions

Estimating the cost of sanctions to the Rhodesian economy involves measuring what has been achieved and maintained against what might have been achieved in the absence of sanctions. It is therefore a thoroughly speculative exercise whose results depend upon the assumptions made about what might have happened had Rhodesia continued along the 1964-65 path of negotiations with the British Government.

It is more meaningful to conclude that in the light of the extraordinary pressures applied the short term position of the economy is surprisingly good and extremely satisfactory. It can be said that the brunt of sanctions so far has been borne by commerce and industry, by profits which declined 18.7 percent in 1966 and by the African wage-earner because of the fall in African employment and because the increase in average earnings only just kept pace with rising prices. It can be said, too, that the terms of trade have been turned against Rhodesia as a result of political pressures. It can also be said that the prospect for 1967 is one of rising economic activity and national income, though in 1968—unless there are major breakthroughs of the sanctions wall—the rate of growth is unlikely to be as good.

The long term implications are more difficult to assess. Clearly the employment and real income per head problems thrown up by the rapid population growth would have existed anyway regardless of sanctions. What has to be assessed is the extent to which the growth forgone in 1966 and 1967 has accentuated the problem. This cannot be measured in economic terms alone but must be seen in the political context of the benefits of greater control over one's own destinies.

Looking ahead, the short term priorities are obvious. The need is to maintain a high level of economic activity while at the same time ensuring relative price stability and securing the external payments position.

The long term priorities would seem to have two facets. First the need to achieve a growth rate of the order of at least 6 percent per annum. Second the need to ensure a more even spread in the distribution of the gains from growth. In other words ensuring that the African population—especially those in the tribal areas—share to an increasing extent the benefits of growth.

The ways in which these objectives can be achieved fall outside this discussion. Two relevant points should be stressed. First, if economic resources of given value are devoted to retarding population growth rather than accelerating production growth, these resources could be 100 or so times more effective in raising per capita incomes.[1] This is because, while population may double in a little over 20 years, natural resources cannot so increase by

1. S. Enke. "The Economic Aspects of Slowing Population Growth". The Economic Journal, March, 1966, pp. 44–56.

definition. At the same time, while it may be possible to increase employment opportunities rapidly enough—though this is highly improbable—very few developing countries are able to save and invest enough each year to double their capital stock over 20 years. Thus family planning and population control must be in the forefront of any drive to achieve better living standards in Rhodesia.

The second point relates to the definition of economic development. It is normally assumed that development is taking place when relative income per capita is increasing. In a dual economy this could be achieved if real income grew in the money sector only so that the impact on the majority of indigenous inhabitants was negligible. This consideration is relevant to the Rhodesian situation. It is quite clear that the non-African community has enjoyed a sustained rise in real income and in the level of employment since 1954. Yet, because of falls in the 1960s real income per capita in 1966 was little different from its 1954 level. Thus the African community has failed to share the fruits of growth to the same extent. Job creation in the money economy has not kept pace with population growth. The absolute gap between average African and average non-African wage earnings has widened substantially from £819 in 1954 to £1,199 in 1966. Income per head in the subsistence sector has remained stagnant over the period at about £12 so that the inhabitant of the subsistence economy has failed to share the gains from economic development. At the same time the proportion of the total population in the subsistence sector has increased substantially.

Therefore, it is essential to do more not only to create job opportunities for the fast growing population but also to ensure that real income per head in the subsistence economy expands so that the majority of the population shares to an increasing extent in the gains from economic growth.

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